

CONFERENCE OF THE EIGHTEEN-NATION COMMITTEE
ON DISARMAMENT

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FINAL VERBATIM RECORD OF THE TWO HUNDRED AND EIGHTY-FIRST MEETING

held at the Palais des Nations, Geneva,
on Thursday, 11 August 1966, at 10.30 a.m.

Chairman: Mr. A. GOMEZ ROBLEDO (Mexico)

PRESENT AT THE TABLE

<u>Brazil:</u>	Mr. A.F. AZEREDO da SILVEIRA
	Mr. D. SILVEIRA da MOTA
	Mr. S. de QUEIROZ DUARTE
	Mr. C. H. PAULINO PRATES
<u>Bulgaria:</u>	Mr. C. LUKANOV
	Mr. B. KONSTANTINOV
	Mr. D. POPOV
	Mr. D. KOSTOV
<u>Burma:</u>	U MAUNG MAUNG GYI
<u>Canada:</u>	Mr. E. L. M. BURNS
	Mr. C. J. MARSHALL
	Mr. P. D. LEE
<u>Czechoslovakia:</u>	Mr. T. LAHODA
	Mr. V. VAJNAR
<u>Ethiopia:</u>	Mr. A. ABERRA
	Mr. A. ZELLEKE
	Mr. B. ASSFAW
<u>India:</u>	Mr. V. C. TRIVEDI
	Mr. K. P. LUKOSE
	Mr. K. P. JAIN
<u>Italy:</u>	Mr. F. CAVALLETTI
	Mr. G. P. TOZZOLI
	Mr. S. AVETTA
	Mr. F. SORO
<u>Mexico:</u>	Mr. A. GOMEZ ROBLEDO
	Mr. M. TELLO MACIAS
<u>Nigeria:</u>	Mr. G. O. IJEWERE
	Mr. M. B. BRIMAH
<u>Poland:</u>	Mr. M. BLUSZTAJN
	Mr. E. STANIEWSKI
	Mr. B. KAJDY

PRESENT AT THE TABLE (cont'd)

Romania:

Mr. N. ECOBESCU
Mr. E. GLASER
Mr. C. UNGUREANU
Mr. A. COROIANU

Sweden:

Mrs. A. MYRDAL
Mr. P. HAMMARSKJOLD
Mr. I. VIRGIN
Mr. R. BOMAN

Union of Soviet Socialist
Republics:

Mr. A. A. ROSHCHIN
Mr. I. I. CHEPROV
Mr. M. P. SHELEPIN
Mr. V. B. TOULINCV

United Arab Republic:

Mr. H. KHALLAF
Mr. A. OSMAN
Mr. A. A. SALAM

United Kingdom:

Lord CHALFONT
Sir Harold BEELEY
Miss E. J. M. RICHARDSON

United States of America:

Mr. A. S. FISHER
Mr. L. WEILER
Mr. C. G. BREAM
Mr. A. NEIDLE

Deputy Special Representative
of the Secretary-General:

Mr. W. EPSTEIN

The CHAIRMAN (Mexico) (translation from Spanish): I declare open the two hundred and eighty-first plenary meeting of the Conference of the Eighteen-Nation Committee on Disarmament.

Mrs. MYRDAL (Sweden): Notwithstanding the fact that today's deliberations were to focus on general and complete disarmament, I beg your permission, Mr. Chairman -- in accordance with a general rule and oft-repeated practice -- to speak on the subject of collateral measures; because today I wish to follow up the line of reasoning in my intervention of last week (ENDC/PV.279), which dealt with the issue of a comprehensive test ban, with some comments mainly centring on another collateral measure: the cut-off of production of nuclear material for weapon purposes. In the view of the Swedish delegation, those two measures continue to be closely linked with each other and with a non-proliferation treaty. Without them the latter kind of treaty, it seems to us, would be both operationally and politically weak.

As in the case of the test ban, I wish to enter a plea for practicality and suggest that we set a target date for achieving agreement on the freezing of production of nuclear-weapon material. The rearrangements called for in the case of such termination of the long-range military programmes for nuclear material supply, which we know involve large and diversified industrial processes, will undoubtedly be more time-consuming than breaking off the comparatively short-range and intermittent series of tests. Would it not be appropriate, I might ask delegations here, to aim at 1 July 1967 as the historic date when further additions to the stockpiles of nuclear-weapon material would cease? If that were an agreed target date both for the cessation of current production and for the elaboration of a treaty, it would give the nuclear-weapon countries time to prepare for the closing of the crucial processes.

For the non-nuclear-weapon countries it could be said to equal a kind of Fanfani moratorium of close to one year's duration -- that is to say, a voluntary and unilateral moratorium. One might go even further in accommodating the nuclear-weapon countries and state that, if they are really sitting down to a serious study of the practical requirements for a phasing-out of the production in question, we ought to be prepared to envisage a flexible pattern -- that is, a series of dates for closure of various sectors of the production, some perhaps later but some, it is hoped, earlier than the date which I have indicated in a tentative way and for the purpose of discussion.

(Mrs. Myrdal, Sweden)

The most intricate problems to tackle refer here, as always, to verification. Fortunately, in regard to the measure of a cut-off we have an agreed foundation to start from: the International Atomic Energy Agency (IAEA) safeguards, to the usefulness of which we know both sides subscribe. They belong to a living system, one being continuously extended, to which the verification needs in connexion with a cut-off agreement, which evidently would have to be applied in a more obligatory fashion, could be linked. Difficulties relating to the pace of extension ought not to be insurmountable.

In this connexion it is interesting to review the suggestions made by the representative of the United States, Mr. Fisher, at our 277th meeting, although they were tied to negotiations for a non-proliferation rather than a cut-off treaty, thus aiming at stopping the ominous production of fissionable materials for weapons in countries which have not started it but not in those which have. We realize how important is the offer that the nuclear-weapon Powers also submit to control of their trade in nuclear material for peaceful purposes, an offer which I know has already been put into practice in some recently-concluded agreements for co-operation on civil uses of atomic energy. It certainly must be a burden involving considerable inconvenience to the great Powers. On the other hand, of course, it does not contribute to any curtailment, still less to any reversal, of the present arms race. Therefore allow me to point out how greatly an international agreement to cut off production for weapon purposes would simplify the situation, as there would then exist no activities to shield from control.

In order to be quite realistic, I believe, we should discuss a time-table for the entry into force of various types of obligations, taking into account the necessity for a gradual phasing-out plan, as I have just mentioned, but taking into account also what has been called the "balance of mutual responsibilities and obligations", (A/RES/2028(XX); ENDC/161) which the non-nuclear-weapon States are interested to see observed. I could well imagine that a reasonable and equitable plan for introducing controls, entailing a series of steps which might follow one another at predetermined but rather protracted intervals, would amount to something like the following: first, controls on all transfers of source or special fissionable materials and principal nuclear facilities between all countries and for all purposes; secondly, control extended also to all new facilities, including not least those capable of producing weapon-grade materials, again in all countries; thirdly and finally, control also of already-existing production facilities.

(Mrs. Myrdal, Sweden)

That is a suggestion which I hope will be seriously examined. It is offered in a desire to be helpful. My Government, as well as others, I am sure, will keep an open mind also for other possible modalities which might grow out of our continued negotiations. Let me simply point out that the first step is very similar to one part of Mr. Fisher's recent proposal envisaging --

"... an undertaking by all States not to provide source or fissionable material, or specialized equipment or non-nuclear material for processing or use of source or fissionable material or for the production of fissionable material, to any other State ... unless such material and equipment are subject to IAEA or equivalent international safeguards" (ENDC/PV.277, pp. 4, 5)

The main difference lies in the dots representing three words which I omitted from the quotation: "for peaceful purposes". We would say "for all purposes". The alteration is self-explanatory: Mr. Fisher's formula refers to the situation of today, when production for weapon purposes is not forbidden; mine to a situation when a cut-off treaty would make such production non-existent.

On this subject I might raise a few additional points, although they refer more to details than to the general merit of an agreement.

One is a question, again directed to the United States proposals just mentioned, concerning a control system which might rely either on the IAEA or on, as it was put, equivalent international safeguards. My question is: what safeguards can really be considered equivalent? If that is meant to refer to various kinds of bilateral arrangements or regional systems, my delegation must beg to differ.

We have to be more stringent when looking to a future when the cut-off of fissionable material production for weapon purposes should be fully implemented. From a less technical and more political point of view, we -- and, I believe, also other nations that are outsiders -- could hardly accept verification which takes place inside a closed system as being "equivalent" to IAEA safeguards, at least if there could not be established some adequate co-operative arrangements for verification purposes between the IAEA and the so-called "equivalent" system. By "international safeguards" we must mean a system open to the observance of all of us. Only a system under such public, international control can really satisfy all the signatories to a treaty.

(Mrs. Myrdal, Sweden)

As a second observation, I should like to touch briefly on the point made by Mr. Fisher at our last meeting (ENDC/PV.280, pp.13 et seq.): that not only explosions for weapon testing but all nuclear test explosions should be prohibited. If a test ban, made truly comprehensive in that way, were combined with a cut-off agreement, there would be no new explosives to use even for such peaceful projects as may become permitted under international control. Thus any such undertakings would have to utilize fissionable material already manufactured, thus reducing the stockpiles already produced for weapon purposes.

The third of my marginal comments refers to the fact that if one such agreement is reached it will have beneficial effects also in other directions. Thus a cut-off treaty with control of all transfers from as well as to signatories would to a certain extent hamper independent production even in countries which had not signed the treaty. An example of such indirect effects relates to the application of the Moscow Treaty, if a rigid interpretation is given to Article I(2), which prohibits participation in any way, even indirectly, in testing by another party. The article states:

"Each of the Parties to this Treaty undertakes furthermore to refrain from causing, encouraging, or in any way participating in, the carrying out of any nuclear weapon test explosion, or any other nuclear explosion, anywhere which would take place in any of the environments described ..." (ENDC/100/Rev.1, p.2).

As is well known, the conducting of tests is a large enterprise, involving various kinds of research and development preparation, logistic support and, what is most important in the present connexion, also supplies of fissionable materials. If the obligations of the Moscow Treaty are scrupulously applied, it can make the conducting of tests by other nations more difficult, the development work more time-consuming, and the whole activity more expensive. If that is a potential effect of the Moscow agreement, it is unquestionably true that a cut-off treaty with verification procedures of the kind I have indicated would have far stronger and more universal effects.

My fourth and final observation on matters of detail is parallel to one I made in my recent statement referring to the test ban: that, generally speaking, the verification requirements seem to undergo an evolution towards attenuation (ENDC/PV.279, p.7). The IAEA system itself is being reformed so as to be less

(Mrs. Myrdal, Sweden)

complicated and cumbersome. The working papers on the matter of control of fissionable material which have been presented by the United Kingdom (ENDC/60) and the United States (ENDC/134, 174) have also moved the requirements in the direction of making verification more automatic and less intrusive. That nourishes our hope that agreement to stop further production of fissionable materials for weapon purposes will soon be feasible.

Why is not such a treaty concluded, when its conditions seem so reasonable and the need for it is so pressing? Cannot the political will-power be mustered? We who are seated in the Eighteen-Nation Committee on Disarmament have a definite responsibility to look after the interests of the world and of the future, not merely such short-term national interests of today as may stand in the way of an agreement on a higher, that is international, level of security.

To bring about a definite change of direction in the arms race so that it goes downwards instead of upwards is what we envisage when we so persistently stress the need for really effective measures like the test ban and the cut-off: a containment of the spectre of endlessly-continuing additions to the quality and quantity of nuclear weapons; because we can imagine what a frightening world would result if the nuclear-weapon States remained free to test and develop and accumulate and spread these weapons.

Although it should be superfluous, I might restate that, when my country insists on agreements concerning a comprehensive test ban and a cut-off -- in conjunction with or even with priority over a mere non-proliferation treaty -- we are motivated by the firm conviction that such measures to reduce or at least freeze present nuclear capabilities would best serve the needs of the world as a whole. When it is sometimes said -- not here but in popular publications -- that non-aligned States are claiming such measures as a kind of "price" for their adherence to a non-proliferation treaty, that is an unwarranted simplification.

The true explanation, of course, can be surmised from the Government declaration which I quoted in my statement on 4 August (ENDC/PV.279, p.5) and which may serve as a kind of Swedish catechism on the issue under discussion: while we are definitely in

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favour of international agreements to hinder proliferation of nuclear weapons, we are also scared by the prospect that the present armament race may be allowed to continue at its perilous pace. Therefore measures which are broad enough to bring a halt to that steeply-spiralling race at the same time as preventing additional countries from "going nuclear" are definitely to be preferred to measures that would merely achieve one and perhaps not the most far-reaching of those goals. In our opinion, immense dangers are inherent in the continuing arms race, in regard both to the qualitative and to the quantitative growth of nuclear armouries, even if the number of military nuclear Powers remains the same as now.

Let us look at it first from the quantitative point of view. There seems to be no spontaneous letting-up of the production of fissionable material for weapon purposes. We appreciate, of course, that the cut-backs of fissionable production announced in April 1964 on behalf of the Soviet Union (ENDC/131), the United Kingdom (ENDC/PV.186, p.34) and the United States (ENDC/132) were rather substantial. However, the production capabilities left were even more substantial, and there are no signs that this course has been switched into reverse.

Such a quantitative increase is also linked, if we come to think of it, with the problem of what we have now almost routinely come to call "dissemination". The saturation point for the nuclear killing capacity may already have been reached by the super-Powers when related to their own needs; some conversion to new types of weapons may be what they are most interested in. However, as long as a freeze of the present stockpiles of fissionable material cannot be brought into force, there will exist increasingly more nuclear weapons to spread -- meaning, in the narrower sense, that they are being transferred from nuclear-weapon States to alien territories or otherwise held in readiness for the support of allies or for new clients. A cut-off treaty would really help to limit such supporting arsenals. Otherwise the danger will multiply, as production may be kept open-ended in order to arm alliances.

Of course deployment also could continue in an ever-widening geographical spread. It is not inconceivable that we might have to look forward to a time when the whole globe will be closely studded with arsenals of nuclear weapons -- the whole globe, that is, with the exception of the countries which even then opt to remain non-aligned. This is the recurrent question in my theme for today: is that the kind of world towards which we are steering? May we not begin to feel like the Norwegian poet who said, "I am afraid that we have come to the wrong planet"?

(Mrs. Myrdal, Sweden)

The future appears no less ominous if one dwells on the qualitative aspect of a continued arms race entailing a kind of macabre perfecting of the nuclear death machines. It is to such an evolution -- which I refuse to call "progress" -- that we want to apply the brakes of a comprehensive test ban. Of course, only those with access to classified material in the archives of the great Powers can fully estimate the dangers inherent in the continued testing of nuclear explosives -- and such testing is being carried on in the atmosphere by two Powers which have not signed the Moscow Treaty and underground by three Powers which have. The range of possibilities for weapon development remains enormous even if only underground tests are considered. The development and proof-testing of warheads for strategical and tactical uses, for air defence, anti-submarine and anti-missile use and so on, may be feasible. Nor need the tests be restricted to weapons of very limited yield; the literature mentions yields of several hundred kilotons.

At the present time the greatest anxiety seems to hover around the possibility, which may just be turning into a probability, that the super-Powers will move into a new, tremendously stepped-up round of arms development centring on anti-ballistic missile defence, or rather on a combination of a system of interceptor missiles and so-called penetration aids for strategic missiles. Both fear and advice to exercise restraint are now often expressed -- for instance, in a recent speech by the Prime Minister of Canada, Mr. Pearson, a speech to which I had the great privilege of listening, as did Mr. Burns, who has already quoted from it some very important passages in his statement on 12 July (ENDC/PV.272, p.8). Mr. Pearson referred to the anti-ballistic missile system as --

"... an enormously costly undertaking which, in the end, would probably lead, as the ballistic missile race did, to ever-mounting defence budgets without any permanent increase in national security or international stability ..." (*ibid.*) For that reason Mr. Pearson advocated an agreement between the super-Powers not to deploy anti-ballistic missile systems.

That there are doubts in the highest places about the rationality of opening up this new dimension in armaments has been indicated repeatedly also in speeches by the United States Secretary of Defense, Mr. McNamara, and reflected in the statement by the representative of the United States at a recent meeting (ENDC/PV.278, pp. 8,9).

(Mrs. Myrdal, Sweden)

An outspoken statement to the same effect was made by the Disarmament Minister in our midst, Lord Chalfont, on 16 June. He said:

"Already there is talk of deploying defensive systems against ballistic missiles. It seems incredible to me that anyone really believes that there can be a fully effective defence against the sort of nuclear armoury now deployed by the two great military alliances of the world. But if that belief exists, and if it leads to the extensive deployment of anti-ballistic missile systems, we should be in no doubt that the arms race will have entered a new and perhaps irreversible phase, and, furthermore, that a serious threat will be posed to whatever stability is provided by the present balance of nuclear power." (ENDC/PV.265, p.5)

In reality, security is becoming more and more expensive and less and less reliable. The step after anti-ballistic missiles can hardly be any other than the one so dourly foreseen first by science-fiction writers but now mentioned as a real possibility by prominent scientists: that the whole of mankind will move into live-in and work-in underground shelters. Thus a major issue now facing decision-makers is the procurement and emplacement of anti-ballistic missile systems and also continued testing for that purpose. The cost factor is so tremendous, running into tens of billions of dollars for even partial attempts at the protection of one country, that already on that ground it would seem reasonable for the great Powers to identify their joint interest by a firm "No" to this new phase of the arms race.

The current discussion about the anti-ballistic missile issue can serve as a reminder of what continued permissibility with regard to underground testing might entail. We should also ask ourselves how much the nuclear megatonnage has already increased while we have been sitting. Should not the Eighteen-Nation Disarmament Committee perhaps carry a burden of responsibility because it has not achieved the kind of agreement which might have put a stop to the threatening madness? Anyway I hope that it serves to convince us that it is imperative that we now obtain both a comprehensive test ban and a cut-off agreement -- that is, agreements which will prevent the arms race from overtaking human reason.

Mr. FISHER (United States of America): I have listened with interest to the remarks of the representative of Sweden. I think I should preface my statement by saying that I too should like to speak today on a collateral measure; I too, in fact, should like to speak about the proposal of the United States for a verified cut-off of production of fissionable materials for weapon purposes (ENDC/120,165). In listening to Mrs. Myrdal's interesting intervention I observed that a few questions were directed more or less towards me. Some of those will be dealt with, I hope, in my remarks this morning; some others, I am afraid, will not, and I shall try to deal with those in an appropriate manner as soon as I can.

I am submitting as a Conference document (ENDC/176), a description of a possible method for monitoring a shut-down reactor, which goes into somewhat greater detail than any previous description which we have made at this Conference. Today I should like to discuss the practical uses of this method in monitoring an important feature of an agreement on a verified halt in the production of fissionable materials for use in weapons.

At this time also I should like to announce my Government's plans for an actual demonstration of this method of monitoring shut-down reactors, to take place later this year at Hanford, Washington. I should like, on behalf of my Government, to extend an invitation to that demonstration to each of the members of the Eighteen-Nation Disarmament Committee and to other nations displaying a vital interest in our disarmament negotiations. As a result of this demonstration, our consideration of methods of verifying shut-down production reactors can be on the basis of first-hand experience rather than of theory alone. I would hope that this demonstration would persuade the States represented at this Conference, as well as others, of the ease and unobtrusiveness with which it is possible to verify a shut-down reactor.

I would hope that the demonstration would make it possible for us to verify the reduction of production of fissionable materials for weapon purposes which the United States and the USSR have both announced they are putting into effect. I would hope that we could agree upon reciprocal plant-by-plant shut-down of reactors utilizing simple but practical verification procedures of the type we shall demonstrate, or similar ones which would be mutually acceptable. This would constitute an easy but important first step towards the complete cessation of production of fissionable materials for weapon purposes which we are all striving to achieve.

(Mr. Fisher, United States)

In my statement at our 277th meeting I described the safeguards systems which my Government thinks would be adequate to ensure that plutonium from peaceful reactors is not used to proliferate nuclear weapons. At that time I pointed out that safeguards on the indigenous peaceful nuclear activities of nuclear-weapon Powers were not relevant to the issue of non-proliferation alone. However, I also indicated that that extension would be relevant to the monitoring of a cut-off -- the step we are now recommending for consideration as a significant move towards disarmament.

Now I might interpose here that the United States does not believe that the cut-off and the non-proliferation agreement should be linked. We have stated our position on that point, and the reasons for it, many times, and I do not need to repeat them now. But the United States does believe that in the context of the cut-off agreement the nuclear Powers should be prepared to accept the same degree of verification that we have proposed for the non-nuclear-weapon Powers as appropriate for safeguarding a non-proliferation agreement. And in the context of the cut-off, as well as in the context of a non-proliferation agreement, we do not seek inspection for its own sake; we wish to make our verification system as simple as possible.

I now wish to turn to steps which the United States has already taken in the vital area of limiting the production of fissionable material for weapon purposes. This beginning provides us with a foundation upon which we can build further measures.

The Committee will recall the unilateral action by the United States to curtail production of fissionable material for use in weapons announced by President Johnson in January 1964 (ENDC/120). That action entailed shutting down four reactors which had been used for the production of plutonium, and decreasing the production of enriched uranium by 25 per cent. This initiative on curtailment of production of fissionable material not only reduced the potential for building additional nuclear weapons but, as we have earnestly hoped, might help to pave the way towards reaching agreement on a total cessation of production of fissionable material for use in weapons, followed by a reduction of nuclear stockpiles.

Additional curtailments of production of uranium 235 were subsequently announced by President Johnson and are currently being implemented. Representatives will recall, I am sure, that President Johnson's announcement of 20 April 1964 (ENDC/132), dealing with all the reductions of the production of weapon-grade fissionable material we had decided upon at that time, was read into the record of our plenary session here (ENDC/PV.185, pp. 14, 15). Representatives will also recall, I am sure, that the then Prime Minister of the United Kingdom, Sir Alec Douglas-Home, associated Her Majesty's Government with this initiative (*ibid*, pp. 13, 16).

(Mr. Fisher, United States)

The United States, having taken the initiative to reduce production of fissionable material, is mindful of the importance of assurance to the world that the reductions are actually implemented. Accordingly I shall summarize the actions we have taken to implement those announcements.

The United States is proceeding on schedule to shut down facilities for production of fissionable material. The four plutonium production reactors have already been shut down: two in 1964 -- one each at Savannah River and Hanford -- and two in 1965, both at Hanford. By July 1964 two sections of the gaseous diffusion plant at Oak Ridge, Tennessee, had been shut down. Electric power for the operation of three gaseous diffusion plants -- one located at Oak Ridge, Tennessee, one at Paducah, Kentucky, and one at Portsmouth, Ohio -- has subsequently been steadily decreased. When the reduction is complete, the level of operation will require 2,000 megawatts of electricity, compared with the pre-cutback level of 5,250 megawatts. Much of today's production is, moreover, to provide fuel for the nuclear power programme. The scheduled reduction of enriched uranium production is to be completed by 1969.

The Government of the Soviet Union announced on 20 April 1964 (ENDC/131) that it also was making substantial reductions in the production of fissionable materials for weapons, and that it would halt straightaway the construction of two plutonium production reactors. Representatives will recall that this announcement of the Chairman of the Council of Ministers of the USSR was also read into the record of our plenary session (ENDC/PV.185, pp. 11 et seq.). We hope that the representative of the Soviet Union will inform this Committee of the progress his Government has made in carrying out that announcement.

We have discussed previously in this Committee the verification measures that might accompany a cut-off of production of fissionable material for weapons. As examples of our thinking, we have submitted a series of working papers: document ENDC/134 of 25 June 1964 outlines the verification system that we believe can provide adequate assurance to all parties of compliance with an agreement to halt production of fissionable material for weapons; document ENDC/172 of 8 March 1966 describes one possible method of demonstrating the destruction of the nuclear weapons to obtain the fissionable materials which we advocate both sides should transfer to peaceful uses; document ENDC/174 of 14 April 1966 describes a specific method of verifying that plutonium production reactors remain shut down between infrequent visits of inspectors. Mr. Foster stated in his remarks in April that we would have more to say on this subject, and I am pleased to do so today.

(Mr. Fisher, United States)

We believe that an attractive feature of the suggested method of verifying the status of shut-down reactors is that it minimizes the intrusive aspects of verification and focuses its attention specifically on that which is to be verified. Only periodically would inspectors need to examine the equipment installed in a reactor. Furthermore, it should be apparent that there are a number of ways in which reliable mechanical aids devised along these lines can be used in other verification roles and thereby reduce the need for personal observation. Yesterday many of the delegations here witnessed a visual briefing by United States experts of how effective and unobtrusive the use of what we refer to as "safing tapes" can be in verifying that a shut-down reactor has remained shut down.

We should like the nations represented here to have further tangible evidence of the efforts my Government is pursuing to find suitable methods of verifying arms control and disarmament measures with minimum intrusion. Therefore, as I indicated earlier in my remarks, I should like on behalf of my Government to extend to each of the members of the Eighteen-Nation Committee on Disarmament -- and to other nations displaying a vital interest in our disarmament negotiations -- an invitation to visit later this year one of the shut-down plutonium production reactors at the Hanford plant near Richland, Washington. During this visit we will demonstrate how the equipment can actually be used on an atomic reactor that has been removed from active production of plutonium. We suggest that the visit take place during the discussions on disarmament at the United Nations General Assembly this autumn.

I wish to emphasize that demonstrating at Hanford how the equipment could be used to verify an actual shut-down reactor does not in itself reflect a decision to place that reactor unilaterally under international safeguards. However, the United States is prepared to accept international verification of the shut-down of a Hanford reactor if the Soviet Union is prepared to reciprocate. Moreover, we will extend this reciprocal offer on a plant-by-plant basis, not only until the four reactors I have described today are under such inspection but until additional facilities are as well. We do not wish to give the impression that the precise techniques we shall show will necessarily be employed in any international inspection; but we do exhibit this method as illustrative of our continuing research into ways to achieve and rely on meaningful arms control and disarmament measures.

(Mr. Fisher, United States)

At this Conference the United States has always put the proposal which we have described as the "cut-off" high on its agenda of arms control measures. We have done so for a reason which perhaps seems too obvious to warrant emphasis but which is of such a fundamental nature that it cannot be said too often. This reason is that it takes fissionable material to make a nuclear weapon. It is for that reason that we have given very great attention to a "cut-off" as a collateral measure which would greatly assist in ensuring non-proliferation. A cut-off, if undertaken by all Powers -- nuclear-weapon and non-nuclear-weapon Powers alike -- would have an enormous, indeed a controlling, impact in preventing the proliferation of nuclear weapons.

It is for this reason that the "cut-off" is a measure which would bring the nuclear arms race among the major Powers to a halt. At this point I should like to remind my colleagues that the "cut-off", as we have come to call it, can be more than just a cut-off in the production of fissionable materials for weapon purposes. The United States has indicated its willingness to modify it so that it will involve an even more significant beginning of nuclear disarmament.

As my colleagues are well aware, the United States is prepared to add to the "cut-off" a transfer of fissionable material to peaceful uses. We have proposed that 100,000 kilogrammes of U-235 be transferred to peaceful purposes: we have suggested that of that amount 60,000 kilogrammes be obtained from the United States and 40,000 kilogrammes be obtained from the Soviet Union. As I mentioned in my statement on 8 March:

"... this total amount of U-235, fully fissioned, would produce an amount of electric power equal to the present power requirements over a period of seven years of the eight non-aligned States represented round this table"

(ENDC/PV.246, p.34).

We have also indicated our willingness to have the 100,000 kilogrammes of U-235 taken from existing nuclear weapons. There would thus be destroyed thousands of nuclear weapons. As we have already indicated, this could be done in a relatively simple manner.

In outlining the measures which the United States has been prepared to add to the cut-off, I should not like to give the impression that the United States insists that they accompany a cut-off. This is not the case. The United States indicated its willingness to agree to those measures in connexion with a cut-off in the hope that this might facilitate our coming to an agreement. This has not so far proved to be the case. Those measures were advanced in the hope that they might meet the objections of others round this table, but they have not led us closer to an agreement.

(Mr. Fisher, United States)

Therefore I should like to approach the problem from the other direction. I should first like to reiterate the position of the United States: that it is prepared to accept a verified cut-off of the production of fissionable materials for use in weapons by itself -- without any other measure -- if that will facilitate agreement. I should like to go even further in this direction. As a way to begin practical action on the cut-off -- as a way to begin nuclear disarmament -- I should like to propose that the United States and the Soviet Union agree to reciprocal shut-downs of reactors producing fissionable materials for weapon purposes. I should like to propose that we do so under simplified practical means of verification which cannot reasonably be labelled espionage by anyone.

We are willing, if the Soviet Union is willing, to develop a reciprocal step-by-step closing down, under appropriate safeguards, of reactors that produce fissionable materials for weapons, because this represents a way to start. It represents a way to start which is practical and realistic in terms of required verification. This we should be happy to demonstrate to all at the Hanford reactor this autumn. And when it does become clear that it is possible to carry out verification which is indeed unobtrusive and yet effective, we hope the Soviet Union will join with us in undertaking the first step which I have described today.

From that first step there can follow other steps so that the "cut-off" can be realized in all its ramifications. Indeed, if the "cut-off" can be realized, we shall not have merely taken a step, but instead, we shall have moved a very long way down the road towards obtaining our goals of non-proliferation and nuclear disarmament.

Lord CHALFONT (United Kingdom): It is customary at these meetings to comment appropriately on the speeches that have been made by representatives who have taken the floor previously, and this perhaps sometimes tends to become rather a formality; but I think that most of my colleagues will agree that this morning we have heard two contributions of quite unusual value, interest and calibre. The speech of the representative of Sweden, Mrs. Myrdal, was thoughtful -- but that is nothing new, as her contributions are always thoughtful. The Committee will know that my delegation does not always agree with the priorities which Mrs. Myrdal has set in stating her views on partial and collateral measures of disarmament. Indeed, I must say now that I agree entirely with the representative of the United States that it would be wrong to make other partial measures of disarmament prerequisites to a non-proliferation treaty or, to be more specific, to tie an agreement on the "cut-off" too closely to the non-proliferation negotiations.

(Lord Chalfont, United Kingdom)

Having said that, I must agree with Mrs. Myrdal's view of the need for a broadly-based non-proliferation strategy and not simply a non-proliferation treaty on its own. I think that many of her suggestions will need, and indeed deserve, the very closest study, not only in some cases for their political implications but also for their technical implications as well.

I welcome too the enormously interesting contribution made by the representative of the United States, Mr. Fisher; it contained hard technical facts, arguments and positive proposals such as are the raw material of our negotiations here. I thought that his emphasis upon the process of minimizing the intrusive aspects of verification was especially important. That is a concept that has many implications outside the immediate context of the cut-off; and I was most interested to hear his invitation to a demonstration of how a shut-down reactor is verified and the kind of inspection agreements that might follow such a demonstration. All those interesting and constructive suggestions obviously also deserve the closest study by all delegations round this table.

Having said that, I in fact propose to talk for a very short time this morning on the subject of general and complete disarmament, the subject on our formal order of business for today. However, before I do so, let me comment briefly on a question which the representative of the United States raised at our last meeting: the question of nuclear explosions for peaceful purposes.

Her Majesty's Government is convinced that in the process of preventing the spread of nuclear weapons, important as that aim may be, we must not at the same time put ourselves in danger of depriving anyone of the benefits that might become available through the peaceful uses of nuclear energy. My delegation therefore fully agrees with the United States thesis that it would be wrong to deprive non-nuclear States of any economic benefits that might derive from that particular use of nuclear energy -- that is to say, the use of nuclear explosions for peaceful purposes. We agree too that, at the same time, the similarity between peaceful and military techniques means that a State which developed the capacity to produce peaceful explosions would equally be in a position to produce nuclear weapons. If a non-nuclear-weapon State carried out a peaceful explosion, the political repercussions would be quite as strong as if it were a military one. It is only right, therefore, that we should recognize and take account of this problem.

(Lord Chalfont, United Kingdom)

At the same time, as Mr. Fisher pointed out in his statement, even the United States, with all its technical and scientific expertise and resources, has not yet established the practical usefulness of peaceful explosions. Speaking without detailed knowledge of the technical background, I suppose, as indeed Mr. Fisher implied, that it would be particularly hard to devise techniques which would be useful for economic development -- for example, for the construction of canals -- but would not involve an infringement of the partial test-ban Treaty (ENDC/100/Rev.1). Until such techniques have been perfected -- if indeed they ever are -- that problem may be more theoretical than practical, at least for some considerable number of years; but it is only right, I repeat, that we should consider it now.

My delegation welcomes the suggestion that it should be incumbent upon nuclear-weapon States to make available to other States such techniques as they may have developed. At some appropriate moment we shall have to consider in detail what form of organization will be needed to superintend that process. Whether the arrangements will be bilateral or multilateral and whether they might indeed involve the establishment of some new international organization are matters for discussion at another time. However, one point will clearly be very important: it will be essential to see that all States have equal access to the benefits of this branch of nuclear science, irrespective of their political affiliations.

Turning now to the subject on our agenda for today, general and complete disarmament, I may say that some time has passed since the United Kingdom delegation has spoken on that subject. Indeed, I propose to be extremely brief today. I should like to explain why my delegation has recently devoted its efforts mainly to partial measures of disarmament rather than to the great sweeping project of establishing a world without arms, and to consider whether there may now be a chance to move forward on a broader front.

I should like to begin by reaffirming my Government's belief in general and complete disarmament as our final goal. It may be possible to establish conditions for a relatively safe and stable peace without completely disarming the world; but it is only in a world where the peace is kept without national armies that there can be perfect security. That, I think, is the main justification for persisting in our efforts to work out a plan for general and complete disarmament.

(Lord Chalfont, United Kingdom)

A second justification is this. It is true that most of the time of this Conference in recent years has been spent in trying to achieve agreement on partial measures. As I shall explain in a moment, I believe that that is right. However, if it is the right and necessary procedure, it is still of the utmost importance to have a plan -- a blueprint, if you like -- worked out as far as possible, which we can consult as we move from one partial measure to another -- a kind of master plan. That may seem to be a platitude, but I think that one can see its force if one imagines a situation in which the ideal of general and complete disarmament and the draft treaties, as imperfect and unagreed as they may be, did not exist at all. The enthusiasm for making great efforts to secure partial measures would, I am convinced, be much reduced if we had no idea where we are going, no clear idea of what it was that we hoped to achieve in the end.

Much useful work was done during the first years of this Conference in examining the two draft treaties put forward by the United States (ENDC/30 and Corr.1 and Add.1, 2, 3) and the Soviet Union (ENDC/2/Rev.1 and Add.1). It is encouraging to note that there are many similarities between the two drafts in framework and construction. The discussions here were also useful in identifying and circumscribing the areas of disagreement.

Since then general and complete disarmament has been discussed intermittently but without much visible progress; and the main efforts of the Conference have been devoted to other, perhaps less ambitious, measures of disarmament. As I have already said, I believe that that has been right; there are those who argue that existing tensions and disputes must make it impossible to conclude a treaty on general and complete disarmament in the foreseeable future; and indeed the difficulties in the way are only too clear to us all.

We have only to look at the war that is going on in Viet-Nam; at the ideological dispute that splits the two great communist countries of the world; at the Chinese programme of nuclear tests and its effect on the stability of Asia. We have only to contemplate circumstances like those to realize that the great Powers of the world are for the moment too preoccupied with matters of their own security and that of their allies to give serious thought to immediate measures of comprehensive disarmament.

(Lord Chalfont, United Kingdom)

However, as President Kennedy once said, peace is a process; it is a way of solving problems. It does not mean simply the absence of war. The pursuit of peace is a process, too -- a process in which the barriers of mistrust are progressively dismantled; in which the resolution of political tensions and crises must go hand in hand with the control of the arms race, which is both the cause and the result of those tensions and crises.

It will be necessary to go through a period of experience of agreements, first in the control and then in the reduction of armaments -- agreements which, by being observed by all parties for some time, will create the political climate in which further and more far-reaching agreements can take root and flourish. An impressive start has already been made with the partial test-ban Treaty. There is no doubt that the continuance of atmospheric tests would have helped the development and refinement of sophisticated weapons, and it is indisputable that that Treaty involved a real sacrifice by the present nuclear Powers.

I do not know what kind of debate went on before the Treaty was signed in the Soviet Union and other countries that are members of the Warsaw Pact, where such discussions are held in a decent obscurity. However, members of this Conference will recall the debate in the countries of the Western alliance between, on the one hand, those who believed that their security would be threatened by the danger of a sudden breach of the treaty by the other side, allowing the development of new techniques which would provide a military advantage, and, on the other hand, those -- whose views, thank heaven, prevailed -- who believed that a calculated risk of that kind was worth taking. Now the world has seen that it is possible for all the signatories to keep a disarmament treaty for a number of years. That, almost as much as the Treaty itself, is of supreme importance and should be an encouragement to us in our work here, including, I believe, our deliberations on general and complete disarmament.

As I said a moment ago, earlier discussions on general and complete disarmament at this Conference have identified and isolated certain formidable points of disagreement. It was not possible then either to get round those obstacles or to overcome them. The proposal for a working group to consider reductions of nuclear delivery vehicles foundered because the members of the Conference were unable to agree on its terms of reference. I do not want to revive that argument now; its course will be all too familiar to my colleagues round this table.

(Lord Chalfont, United Kingdom)

I should like instead to examine the ideas put forward at our 271st meeting by the representative of the United Arab Republic. I think that they may provide a new formula to help us move forward. In his interesting speech at that meeting Mr. Khallaf proposed that the Conference should first try to agree on an estimate of the function and the nature of deterrence and then set up a working group to examine the intrinsic elements of the instrument of deterrence. Other representatives will no doubt have studied closely, as I have, Mr. Khallaf's thoughtful analysis of the relationship between the idea of deterrence and the means that have to be used to maintain it.

My delegation believes that those two proposals are worth serious consideration by the Conference. It may be possible, by going back to the concept of nuclear deterrence, which after all lies behind both draft treaties, and by making a serious and detailed analysis of it, to make some progress towards agreement. For obvious reasons I do not propose today to embark on a thorough examination of that concept. There is a voluminous literature already on the subject. However, it may be worth while mentioning three points which I believe are fundamental to any such discussion.

First, as the representative of the United Arab Republic pointed out, a situation of mutual deterrence has existed since the nuclear weapon was invented, or at any rate since it became part of the armouries of the two great contending power groups of the world; and this so-called stalemate has done much to prevent the outbreak of a nuclear war even at moments of great and acute tension. We might perhaps do well to try to examine in detail how this deterrence has worked in the past, to see what the balance was between the opposing forces at particular moments of crisis and what calculations were made about the extent to which nuclear weapons were relevant and usable. Having done that, we should make it a primary aim to ensure that conditions at least as stable as those which have existed in the past should prevail throughout any process of disarmament that we try to work out.

Secondly, I would suggest that in attempting such an analysis we should not tie ourselves down by relating it to the first stage of general and complete disarmament. What I believe we need first is an objective examination of the essential concept of deterrence itself. Thereafter we should seek to apply it to the stage-by-stage process of general and complete disarmament.

The third point, which has led to the most intractable difficulties in the past but which cannot be ignored, is the need to ensure that that balance is seen to exist at all stages of the disarmament process: the need to be reasonably certain that neither side can maintain or create forces above the levels postulated. The lower the

(Lord Chalfont, United Kingdom)

level of forces we decide to set, the greater the degree of certitude we shall need. That is of course connected with the problem of verification. Without a degree of inspection which all parties regard as adequate for particular force levels, deterrence will not work. It may therefore be necessary to set the initial levels fairly high. As scientific techniques improve and confidence is built up, the position will improve.

I am fully conscious that this brief reference to the concept of nuclear deterrence does not break any new ground. It does not examine the problem in any detail. Least of all does it offer any miraculous solution to our problems. However, I should like to say that the British Government has been studying this particular subject closely for some time, and my delegation would be ready to contribute to any discussion of the concept of deterrence that might take place in this Committee or in any working group that might be set up under its auspices.

The purpose of my remarks today, therefore, is quite simply to urge other members of the Conference to give favourable consideration to the proposals made by the representative of the United Arab Republic. The successful establishment of a working group -- in particular after the failure of the Conference to reach agreement last time -- would mark a significant step forward. It is, I am afraid, too late for such a group actually to begin work during this session; but it would be useful if we could at least agree in principle that it should do so as soon as possible when we resume work after the next session of the United Nations General Assembly.

The Conference decided to issue the following communiqué:

"The Conference of the Eighteen-Nation Committee on Disarmament today held its 281st plenary meeting in the Palais des Nations, Geneva, under the chairmanship of H.E. Ambassador Antonio Gomez Robledo, representative of Mexico.

"Statements were made by the representatives of Sweden, the United States and the United Kingdom.

"The next meeting of the Conference will be held on Tuesday, 16 August 1966, at 10.30 a.m."

The meeting rose at 11.55 a.m.

